

LA7214

VCR-Use Automatic Channel Selection Peripheral

Overview

The LA7214 is a VCR-use automatic channel selection peripheral IC that contains a sync separator, a video buffer, and a comparator.

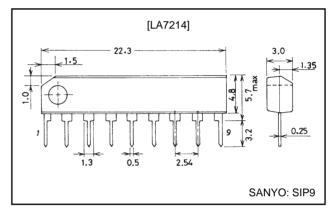
Functions and Features

- · Sync separator
- · Video buffer
- Comparator
- Recommended supply voltage: 5V
- Sync separator, comparator output of open collector type $(R_L=10k\Omega)$, negative polarity output.

Package Dimensions

unit: mm

3017C-SIP9



Specifications

Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	VCC max		7.0	V
Allowable power dissipation	Pd max	Ta≤75°C	150	mW
Operating temperature	Topr		−15 to +75	°C
Storage temperature	Tstg		-40 to +125	°C

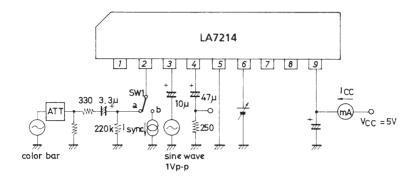
Operating Conditions at Ta=25°C

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Parameter	Symbol	Conditions	Ratings	Unit
Recommended supply voltage	Vcc		5.0	V
Operating voltage range	VCC op		4 to 6	V

Operating Characteristics at Ta=25°C, V_{CC}=5V

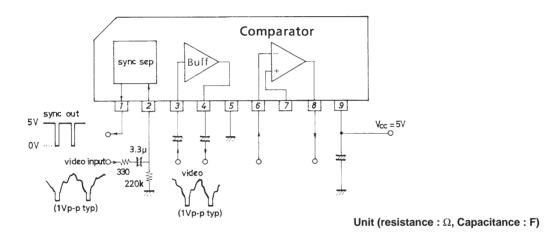
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Circuit Current	ICC	No load	4	6.5	9	mA
Sync separation operating current	ISYNC	SW1=b		85		μΑ
Sync separation minimum input	V _I min	Color bar signal		-12		dB
level		1Vp-p=0dB, SW1=a				
Buffer amp gain	G ₁	R _L =240Ω, V _{IN} =1Vp-p, 500kHz	-2	-1	0	dB
Buffer amp gain	G ₂	R _L =240Ω, V _{IN} =1Vp-p, 5MHz	-2	-1	0	dB
Comparator reference voltage	٧7			2.5		V
Hysteresis amount	ΔV_7	Δ V7=V7H-V7L		50		mV
Output DC level	V _{1H}	No load	4.9			V
Output DC level	V ₁ L	No load			0.2	V
Output DC level	V ₈ H	No load	4.9			V
Output DC level	V ₈ L	No load			0.2	V

Test Circuit



Unit (resistance : Ω , Capacitance : F)

Sample Application Circuit



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